UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,178	12/05/2005	Stefan Lanio	ZIMR/0019	1197

26290 7590 07/08/2008
PATTERSON & SHERIDAN, L.L.P.
3040 POST OAK BOULEVARD
SUITE 1500
HOUSTON, TX 77056

EXAMINER	
JONES, JAMES	

ART UNIT	PAPER NUMBER
2873	

MAIL DATE	DELIVERY MODE
07/08/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/540,178	LANIO, STEFAN	
	Examiner	Art Unit	
	JAMES C. JONES	2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 June 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18 and 34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18 and 34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 June 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/17/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I in the reply filed on 6/6/2008 is acknowledged.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement filed 6/17/2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. Specifically, copies of the cross-out references were not provided and therefore these references have not been considered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-18 and 34 rejected under 35 U.S.C. 102(b) as being anticipated by Hamaguchi et al. (20010028038) hereafter '038.

'038 discloses the limitations therein including the following:

Regarding claims 1 and 17 '038 discloses a lens system for a plurality of charged particle beams, comprising: at least two lens modules (fig. 18A, 18B), each comprising a first pole piece, a second pole piece and at least one opening for a charged particle beam (fig. 1, 12A, 12B, 18A, 18B, par. [0124]-[0126] [0158]-[0160]); and at least one excitation coil providing a magnetic flux to the at least two lens modules, wherein each lens module constitutes a component (fig. 18A, 18B, par. [0007]).

Regarding claim 2 '038 discloses the lens system according to claim 1, wherein one charged particle beam travels through each of the openings, thereby being focused in a lens field area (fig. 18A).

Regarding claim 3 '038 discloses the lens system according to claim 1, wherein the center of each opening provides an optical axis and wherein a lens field corresponding to each opening has at least two planes of symmetry with respect to its optical axis (fig. 12A, 12B, 15B, 18A, 18B).

Regarding claim 4 '038 discloses the lens system according to claim 1, wherein the openings of all lens modules sharing one excitation coil form a row of openings (fig. 1, fig. 18A).

Regarding claim 5 '038 discloses the lens system according to claim 1, wherein at least four openings are provided within one row, thereby increasing symmetry for each opening with respect to its optical axis (fig. 1, 12A, 18A).

Regarding claim 6 '038 discloses the lens system according to claim 1, wherein the at least one excitation coil has a non-circular shape (fig. 1, par. [0007]).

Regarding claim 7 '038 discloses the lens system according to claim 1, wherein the at least one excitation coil has substantially the shape of a rectangle with rounded edges (par. [0007]).

Regarding claim 8 '038 discloses the lens system according to claim 1, further comprising at least two lens rows, each comprising an excitation coil; and at least two lens modules arranged next to each other to form a two-dimensional arrangement of openings (fig. 1, fig. 18A).

Regarding claim 9 '038 discloses the lens system according to claim 1, wherein the at least two lens modules are arranged to form a two-dimensional arrangement of at least four openings, and thereby sharing one excitation coil (fig. 18A).

Regarding claim 10 '038 discloses the lens system according to claim 1, wherein the openings for the charged particle beams have at least in one direction a distance with respect to each other of about 10 mm to about 90 mm (fig. 1, 18A).

Regarding claim 11 '038 discloses the lens system according to claim 9, wherein each row of lens modules is terminated at its ends by a shielding plate (fig. 1, fig. 18A).

Regarding claim 12, '038 discloses the lens system according to claim 1, wherein each lens module is positioned in relation to an adjacent module by providing a gap of about 0.1 mm to 3 mm (fig. 1, 12A, 15B, 17A, 18A).

Regarding claim 13 '038 discloses the lens system according to claim 12, wherein the gap contains a non-magnetic material (fig. 1).

Regarding claim 14 '038 discloses the lens system according to claim 1, wherein each lens module comprises magnetic flux shaping openings (fig. 18A, 18B).

Regarding claim 15 '038 discloses the lens system according to claim 1, wherein for each magnetic sub-lens, an electrostatic immersion lens is provided (fig. 1, par. [0120] [0202]).

Regarding claim 16 '038 discloses the lens system according to claim 15, wherein each electrostatic immersion lens comprises at least two electrodes (par. [0202]).

Regarding claim 18 '038 discloses the method according to claim 17, wherein each module is manufactured by first providing a cylindrical intermediate product and then flattening at least two sides of the cylindrical intermediate product (fig. 1).

Regarding claim 34 '038 discloses a multiple charged particle beam device, comprising: a charged particle beam source (abstract); a detector for detecting secondary particles (fig. 1, abstract, par. [0089][0188]-[0189]); beam shaping means (fig 1, par. [0187][0197]-[0199]); a housing for the charged particle beam column, wherein the housing can be evacuated (fig. 1); at least one lens system comprising: at least two lens modules, each comprising a first pole piece, a second pole piece and at least one opening for a charged particle beam (fig. 1, 18A, 18B); and at least one excitation coil providing a magnetic flux to the at least two lens modules, wherein each lens module constitutes a component (fig. 1, 18A, 18B).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES C. JONES whose telephone number is

(571)270-1278. The examiner can normally be reached on Monday thru Friday, 8 a.m. to 5 p.m. est. time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on (571) 272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James C. Jones/
Examiner, Art Unit 2873
7/1/2008

/Jordan M. Schwartz/
Primary Examiner, Art Unit 2873